

# Kirill A Velizhanin

## List of Publications by Year in descending order

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36  
papers

1,308  
citations

394421

19  
h-index

345221

36  
g-index

43  
all docs

43  
docs citations

43  
times ranked

2106  
citing authors

#	ARTICLE	IF	CITATIONS
1	Probing excitonic states in suspended two-dimensional semiconductors by photocurrent spectroscopy. <i>Scientific Reports</i> , 2014, 4, 6608.	3.3	351
2	Surface Ligands Increase Photoexcitation Relaxation Rates in CdSe Quantum Dots. <i>ACS Nano</i> , 2012, 6, 6515-6524.	14.6	128
3	Photoluminescence Dynamics of Aryl $sp^3$ Defect States in Single-Walled Carbon Nanotubes. <i>ACS Nano</i> , 2016, 10, 8355-8365.	14.6	80
4	Heat transport through model molecular junctions: A multilayer multiconfiguration time-dependent Hartree approach. <i>Chemical Physics Letters</i> , 2008, 460, 325-330.	2.6	78
5	Fluorescent Carbon Nanotube Defects Manifest Substantial Vibrational Reorganization. <i>Journal of Physical Chemistry C</i> , 2016, 120, 11268-11276.	3.1	68
6	Excitonic effects in two-dimensional semiconductors: Path integral Monte Carlo approach. <i>Physical Review B</i> , 2015, 92, .	3.2	49
7	Evolution of Carbon Clusters in the Detonation Products of the Triaminotrinitrobenzene (TATB)-Based Explosive PBX 9502. <i>Journal of Physical Chemistry C</i> , 2017, 121, 23129-23140.	3.1	45
8	Solvent- and Wavelength-Dependent Photoluminescence Relaxation Dynamics of Carbon Nanotube $sp^3$ Defect States. <i>ACS Nano</i> , 2018, 12, 8060-8070.	14.6	41
9	Meir's "Wingreen formula for heat transport in a spin-boson nanojunction model. <i>Journal of Chemical Physics</i> , 2010, 133, 084503.	3.0	39
10	Probing plasmons in graphene by resonance energy transfer. <i>Physical Review B</i> , 2011, 84, .	3.2	38
11	Driving denaturation: Nanoscale thermal transport as a probe of DNA melting. <i>Physical Review E</i> , 2011, 83, 050906.	2.1	37
12	Numerical Study of Carrier Multiplication Pathways in Photoexcited Nanocrystal and Bulk Forms of PbSe. <i>Physical Review Letters</i> , 2011, 106, 207401.	7.8	37
13	An exciton scattering model for carrier multiplication in semiconductor nanocrystals: Theory. <i>Journal of Chemical Physics</i> , 2010, 133, 084508.	3.0	35
14	Crossover behavior of the thermal conductance and Kramers's transition rate theory. <i>Scientific Reports</i> , 2015, 5, 17506.	3.3	28
15	Time resolved small angle X-ray scattering experiments performed on detonating explosives at the advanced photon source: Calculation of the time and distance between the detonation front and the x-ray beam. <i>Journal of Applied Physics</i> , 2017, 121, .	2.5	28
16	Adsorbate Transport on Graphene by Electromigration. <i>Physical Review Letters</i> , 2012, 109, 095504.	7.8	27
17	Tunable thermal switching via DNA-based nano-devices. <i>Nanotechnology</i> , 2013, 24, 095704.	2.6	23
18	Photoluminescence Intensity Fluctuations and Temperature-Dependent Decay Dynamics of Individual Carbon Nanotube $sp^3$ Defects. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 1423-1430.	4.6	23

#	ARTICLE	IF	CITATIONS
19	Tunable Adsorbate-Adsorbate Interactions on Graphene. <i>Physical Review Letters</i> , 2013, 111, 115502.	7.8	21
20	Topological quantization of energy transport in micromechanical and nanomechanical lattices. <i>Physical Review B</i> , 2018, 97, .	3.2	20
21	Thermal transport in dimerized harmonic lattices: Exact solution, crossover behavior, and extended reservoirs. <i>Physical Review E</i> , 2017, 95, 012137.	2.1	17
22	Numerical analysis of carrier multiplication mechanisms in nanocrystalline and bulk forms of PbSe and PbS. <i>Physical Review B</i> , 2012, 86, .	3.2	15
23	Geometric universality of plasmon modes in graphene nanoribbon arrays. <i>Physical Review B</i> , 2015, 91, .	3.2	14
24	Electromigration of bivalent functional groups on graphene. <i>Physical Review B</i> , 2014, 89, .	3.2	13
25	Controlled dynamic screening of excitonic complexes in 2D semiconductors. <i>Scientific Reports</i> , 2018, 8, 768.	3.3	11
26	Topology, landscapes, and biomolecular energy transport. <i>Nature Communications</i> , 2019, 10, 4662.	12.8	8
27	Probing Interband Coulomb Interactions in Semiconductor Nanostructures with 2D Double-Quantum Coherence Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2011, 115, 5372-5382.	2.6	7
28	Automated fitting of a semi-empirical multiphase equation of state for carbon. <i>AIP Conference Proceedings</i> , 2020, , .	0.4	6
29	Multi-exciton emission from solitary dopant states of carbon nanotubes. <i>Nanoscale</i> , 2017, 9, 16143-16148.	5.6	5
30	The equation of state and shock-driven decomposition of polymethylmethacrylate (PMMA). <i>Journal of Applied Physics</i> , 2022, 131, .	2.5	5
31	Renormalization of optical transition strengths in semiconductor nanoparticles due to band mixing. <i>Chemical Physics</i> , 2016, 481, 165-176.	1.9	2
32	A spin-1 representation for dual-funnel energy landscapes. <i>Journal of Chemical Physics</i> , 2018, 149, 035101.	3.0	2
33	Exciton relaxation in carbon nanotubes via electronic-to-vibrational energy transfer. <i>Journal of Chemical Physics</i> , 2019, 151, 144703.	3.0	2
34	An experimental study of the solubility of rare earth chloride salts (La, Nd, Er) in HCl bearing water vapor from 350 to 425Å°C. <i>Geochimica Et Cosmochimica Acta</i> , 2021, , .	3.9	1
35	Kinetics of carbon condensation in detonation of high explosives: First-order phase transition theory perspective. <i>Journal of Chemical Physics</i> , 2021, 155, 164302.	3.0	1
36	Reshock analysis for PMMA driven above the threshold for chemical decomposition. <i>AIP Conference Proceedings</i> , 2020, , .	0.4	1